

WHAT IS CLAIMED IS:

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1. A liquid jet recording apparatus for
ejecting a recording composition from orifices toward a
receiving medium so as to accomplish a recording, said
recording composition formed by dispersing fine
10 particles, wherein:

said orifices have a diameter less than 25 μ
m; and

each of said fine particles has a size D_p
determined by a relationship

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$$0.001 \leq D_p/D_0 \leq 0.01$$

wherein D_0 represents a diameter of said orifices.

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2. The apparatus as claimed in claim 1,
wherein said recording composition comprises a plurality
of color recording compositions, each of said color
recording compositions including said dispersed fine
25 particles corresponding to a respective color, the

plurality of color recording compositions being
ejectable from each of said orifices corresponding to
the respective color.

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3. The apparatus as claimed in claim 2,
further comprising a plurality of recording heads which
10 eject the plurality of color recording compositions and
form a head unit.

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4. The apparatus as claimed in claim 3,
wherein said head unit includes a nozzle part and a
recording liquid reservoir part integrally formed with
the nozzle part.

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5. The apparatus as claimed in claim 3,
wherein said head unit includes a nozzle part and a
25 recording liquid reservoir part separable from the

nozzle part.

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6. The apparatus as claimed in claim 5,
wherein said recording liquid reservoir part is
separable according to a kind of the recording
composition.

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7. A liquid jet recording apparatus for
15 ejecting a recording composition from orifices toward a
receiving medium so as to accomplish a recording, said
recording composition formed by dispersing fine
particles, wherein:

20 said orifices have a diameter less than 25 μ
m; and

a content of said fine particles in said
recording composition is in the range of 2 to 10% by
weight and a solid content of said recording composition
including said fine particles is less than 15% by weight.

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8. The apparatus as claimed in claim 7,
wherein said recording composition comprises a plurality
of color recording compositions, each of said color
recording compositions including said dispersed fine
5 particles corresponding to a respective color, the
plurality of color recording compositions being
ejectable from each of said orifices corresponding to
the respective color.

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9. The apparatus as claimed in claim 8,
further comprising a plurality of recording heads which
15 eject the plurality of color recording compositions and
form a head unit.

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10. The apparatus as claimed in claim 9,
wherein said head unit includes a nozzle part and a
recording liquid reservoir part integrally formed with
the nozzle part.

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11. The apparatus as claimed in claim 9,
wherein said head unit includes a nozzle part and a
recording liquid reservoir part separable from the
nozzle part.

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12. The apparatus as claimed in claim 11,
10 wherein said recording liquid reservoir part is
separable according to a kind of the recording
composition.

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13. A liquid jet recording apparatus for
ejecting a recording composition from orifices toward a
receiving medium so as to accomplish a recording, fine
20 particles having a size D_p being dispersed in said
recording composition, each of said orifices being a tip
of a liquid passageway, wherein:

said orifices have a diameter less than 25
 μm ; and

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D_p is determined by a relationship:

$$D_p/t \leq 0.01$$

wherein t is a length of said orifices having a uniform cross-sectional area at an outlet portion.

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14. The apparatus as claimed in claim 13,
further comprising a nozzle plate having second orifices
10 communicating with liquid passageways.

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15. The apparatus as claimed in claim 13,
wherein a distance between said orifices and a surface
of the receiving medium is less than $100t$, and said
recording composition is ejected from said orifices in a
direction of gravity approximately.

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16. The apparatus as claimed in claim 13,
25 further comprising a plurality of recording heads which

eject the plurality of color recording compositions and form a head unit.

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17. The apparatus as claimed in claim 16,
wherein said head unit includes a nozzle part and a
recording liquid reservoir part integrally formed with
10 the nozzle part.

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18. The apparatus as claimed in claim 16,
wherein said head unit includes a nozzle part and a
recording liquid reservoir part separable from the
nozzle part.

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19. The apparatus as claimed in claim 18,
wherein said recording liquid reservoir part is
25 separable according to a kind of the recording

composition.

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20. A liquid jet recording apparatus for
ejecting a recording composition from orifices toward a
receiving medium so as to accomplish a recording, said
recording composition formed by dispersing fine
10 particles, wherein:

said orifices are formed of resin material and
have a diameter less than ^B25 μm ; and

said resin material has a hardness of Rockwell
M65 to M120.

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21. The apparatus as claimed in claim 20,
20 wherein each of said fine particles is a pigment having
a diameter ranging from 0.02 μm to 0.2 μm .

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22. The apparatus as claimed in claim 20,
further comprising a plurality of recording heads which
eject the plurality of color recording compositions and
form a head unit.

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23. The apparatus as claimed in claim 22,
wherein said head unit includes a nozzle part and a
10 recording liquid reservoir part integrally formed with
the nozzle part.

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24. The apparatus as claimed in claim 22,
wherein said head unit includes a nozzle part and a
recording liquid reservoir part separable from the
nozzle part.

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25. The apparatus as claimed in claim 24,
25 wherein said recording liquid reservoir part is

separable according to ~~a~~^B kind of the recording
composition.

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